

## Appendix B: CIP Cost Analysis Forms

The following tables are detailed cost analysis summaries for each of the recommended bikeway facility segments shown in Chapter 4. Note that right-of-way acquisition is not included.

### City of Chula Vista Bikeway Master Plan Update

#### Capital Cost Estimate

Rank: 1

#### Bayshore Bikeway - E Street to F Street

- Continues existing bike path to Goodrich Aerostructures property
- Part of Bayshore Bikeway and SANDAG Regional Bikeway Corridor Network
- Coordination with San Diego and Arizona Eastern Railway needed to acquire right-of-way
- Adequate width available to install 10-12' wide bike path. Existing ~41' right-of-way
- Install pedestrian signal crossing at Lagoon Drive to allow bike path users to travel through intersection and to improve visibility. If warranted, bicycle signal is also recommended
- All ramps must meet ADA requirements

Length: 1,320 Feet

0.25 Miles

#### Primary Costs

#### Unit

#### Unit Cost

#### Quantity

#### Total Cost

#### Class 1 Bicycle Path:

Bike Path Striping/Signing	MI	\$3,300.00	0.25	\$825
144" (12') AC Path (3" thickness) w/Agg. Base (3/16")	SF	\$3.50	10,560	\$36,960
2-24" Parallel DG Side Paths (3")	SF	\$2.10	10,560	\$22,176
Clear and Grub	SF	\$1.00	10,560	\$10,560
Subgrade Prep/Exec	CY	\$16.50	587	\$9,685
Drainage (PVC drainage system)	LF	\$5.50	1,320	\$7,260
Fencing or Guardrail	LF	\$35.00	1,320	\$46,200
Pedestrian Signal Crossing including ADA ramps	LS	\$150,000.00	1	\$150,000
Subtotal:				\$283,666

#### Additional Costs:

Contingencies (20%):	\$56,733
Construction Costs with Contingencies:	\$340,399
Engineering and Design (10%):	\$34,040
Administration (5%):	\$17,020
Construction Management (7%):	\$23,828

#### Total Construction Costs:

\$415,287

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 2

### I-805 Corridor b/w Telegraph Canyon Road to Bonita Road/Sweetwater River - North City Limit

- Part of SANDAG Regional Bikeway Corridor Network and South Bay Bus Rapid Transit (BRT) Project Phase Two (Phase Two to include managed lanes on I-805)
- Provides north-south bicycle and pedestrian corridor and ensures connection between downtown Chula Vista and National City
- Bike path should be included as part of overall project and cleared through managed lanes environmental document. Accommodate in Phase Two design by grading terrace 14 feet in width along east side of freeway corridor so that bike path is not precluded if it must be constructed separately later. Terrace along east side of the freeway could be used initially for construction equipment logistics without impacting freeway traffic.
- Connects to proposed bike route on East J Street overpass over I-805 where there are no on- or off-ramps
- Access ramps to Chula Vista street network should meet ADA requirements and provide safety measures at intersections. Whenever possible, connections to existing intersections should be planned to utilize pedestrian signals for crossing streets. If warranted, separate bicycle signals and crossing may be implemented.

Length: 8,870 Feet

1.68 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 1 Bicycle Path:</b>				
Bike Path Striping/Signing	MI	\$3,300.00	1.68	\$5,544
96" AC Path (3" thickness) w/Agg. Base (3/16")	SF	\$3.50	70,963	\$248,371
2-24" Parallel DG Side Paths (3")	SF	\$2.10	70,963	\$149,023
Clear and Grub	SF	\$1.00	70,963	\$70,963
Subgrade Prep/Exec	CY	\$16.50	3,942	\$65,043
Drainage (PVC drainage system)	LF	\$5.50	8,870	\$48,787
Environmental clearance	LS	\$250,000.00	1	\$250,000
Regional agency coordination	LS	\$200,000.00	1	\$200,000
<b>Subtotal:</b>				<b>\$1,037,731</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$207,546</b>
<b>Construction Costs with Contingencies:</b>	<b>\$1,245,278</b>
<b>Engineering and Design (10%):</b>	<b>\$124,528</b>
<b>Administration (5%):</b>	<b>\$62,264</b>
<b>Construction Management (7%):</b>	<b>\$87,169</b>
<b>Total Construction Costs:</b>	<b>\$1,519,239</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 3**

### Bayshore Bikeway - F Street to H Street

- Part of Bayshore Bikeway and SANDAG Regional Bikeway Corridor Network
- Coordination with San Diego and Arizona Eastern Railway and Goodrich Aerostructures needed to acquire right-of-way
- Adequate width to install 10-12' wide bike path. Existing ~41' right-of-way
- Install pedestrian signal crossing at H Street to allow bike path users to travel through intersection and to improve visibility. If warranted, bicycle signal also recommended
- All ramps must meet ADA requirements

Length: 2,693 Feet

0.51 Miles

### Primary Costs

#### Unit

#### Unit Cost

#### Quantity

#### Total Cost

### Class 1 Bicycle Path:

Bike Path Striping/Signing	MI	\$3,300.00	0.51	<b>\$1,683</b>
144" (12') AC Path (3" thickness) w/Agg. Base (3/16")	SF	\$3.50	21,542	<b>\$75,398</b>
2-24" Parallel DG Side Paths (3")	SF	\$2.10	21,542	<b>\$45,239</b>
Clear and Grub	SF	\$1.00	21,542	<b>\$21,542</b>
Subgrade Prep/Exec	CY	\$16.50	1,197	<b>\$19,751</b>
Drainage (PVC drainage system)	LF	\$5.50	2,693	<b>\$14,810</b>
Fencing or Guardrail	LF	\$35.00	2,693	<b>\$94,255</b>
Pedestrian Signal Crossing	LS	\$150,000.00	1	<b>\$150,000</b>
<b>Subtotal:</b>				<b>\$422,679</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$84,536</b>
<b>Construction Costs with Contingencies:</b>	<b>\$507,215</b>
<b>Engineering and Design (10%):</b>	<b>\$50,722</b>
<b>Administration (5%):</b>	<b>\$25,361</b>
<b>Construction Management (7%):</b>	<b>\$35,505</b>

### Total Construction Costs:

**\$618,802**

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 4

### Bayshore Bikeway - H Street to Bayshore Bikeway / Palomar Street

- Part of Bayshore Bikeway and SANDAG Regional Bikeway Corridor Network
- Coordination with San Diego and Arizona Eastern Railway and San Diego Port District needed to acquire right-of-way
- Adequate width available to install 10-12' wide bike path. Existing ~41' right-of-way
- Utilize existing controlled crossing at Marina Pkwy/J Street and Bay Boulevard to allow bike path users to travel through intersection
- All ramps must meet ADA requirements

Length: 9,029 Feet

1.71 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 1 Bicycle Path:</b>				
Bike Path Striping/Signing	MI	\$3,300.00	1.71	\$5,643
144" (12') AC Path (3" thickness) w/Agg. Base (3/16")	SF	\$3.50	72,230	\$252,806
2-24" Parallel DG Side Paths (3")	SF	\$2.10	72,230	\$151,684
Clear and Grub	SF	\$1.00	72,230	\$72,230
Subgrade Prep/Exec	CY	\$16.50	4,013	\$66,215
Drainage (PVC drainage system)	LF	\$5.50	9,029	\$49,660
Fencing or Guardrail	LF	\$35.00	9,029	\$316,015
<b>Subtotal:</b>				<b>\$914,254</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$182,851</b>
<b>Construction Costs with Contingencies:</b>	<b>\$1,097,104</b>
<b>Engineering and Design (10%):</b>	<b>\$109,710</b>
<b>Administration (5%):</b>	<b>\$54,855</b>
<b>Construction Management (7%):</b>	<b>\$76,797</b>

**Total Construction Costs: \$1,338,467**

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 1

### Main Street - I-5 to Main Court

- Proposed in 2005 Bikeway Master Plan
- Existing Class 3 bike route upgrade to Class 2 bike lane
- Existing curb-to-curb width: 60'-81'
- Proposed alignment at minimum width (64' and 5 travel lanes): Four 10' travel lanes, one 12' TWLT and two 6' bike lanes. On-street parking removed
- Lane diet traffic calming along narrow section to reduce speeds and wider bike lane to accommodate cyclists
- For wider sections, 6' bike lanes and/or 2' buffers recommended to give cyclists buffer between travel lanes and/or on-street parking
- Increase bicycle awareness signage and directional signage throughout route. Install directional signage informing cyclists that I-805 is bike route to Palm Avenue in City of San Diego
- Colored bike lanes recommended at I-5 and I-805 on-off ramps for greater visibility crossing these intersections

Length: 15,259 Feet

2.89 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	2.89	<b>\$9,537</b>
Stripe Removal	LF	\$1.50	15,259	<b>\$22,889</b>
Restripe Centerline w/Reflectors	LF	\$2.25	15,259	<b>\$34,333</b>
Pavement Markings	EA	\$300.00	51	<b>\$15,259</b>
Curb and Gutter (east side only)	LF	\$32.00	15,259	<b>\$488,294</b>
<b>Subtotal:</b>				<b>\$570,313</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$114,063</b>
<b>Construction Costs with Contingencies:</b>				<b>\$684,375</b>
<b>Engineering and Design (10%):</b>				<b>\$68,438</b>
<b>Administration (5%):</b>				<b>\$34,219</b>
<b>Construction Management (7%):</b>				<b>\$47,906</b>
<b>Total Construction Costs:</b>				<b>\$834,938</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 2

### Otay Lakes Road - Rutgers Avenue to end of existing WB bike lanes

- Fills westbound Class 2 gap on Otay Lakes Road. Eastbound bike lane exists
- Existing curb-to-curb width: 84' with 3 travel lanes each way
- Reduce left turn pocket buffer to accommodate bike lanes through Rutgers Avenue
- Right turn only lane into and from Otay Ranch Mobile Home Park utilizes space needed for bike lane. Narrow travel lanes and install bike lanes.
- Colored bike lanes recommended at high conflict areas around mobile home park entrance and merging out of right-turn only lane approaching Rutgers Avenue
- Increase bicycle awareness signage throughout this segment

Length: 1,584 Feet

0.30 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	0.30	<b>\$990</b>
Stripe Removal	LF	\$1.50	1,584	<b>\$2,376</b>
Restripe Centerline w/Reflectors	LF	\$2.25	1,584	<b>\$3,564</b>
Pavement Markings	EA	\$300.00	5	<b>\$1,584</b>
Curb and Gutter (east side only)	LF	\$32.00	1,584	<b>\$50,688</b>
<b>Subtotal:</b>				<b>\$59,202</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$11,840</b>
<b>Construction Costs with Contingencies:</b>				<b>\$71,042</b>
<b>Engineering and Design (10%):</b>				<b>\$7,104</b>
<b>Administration (5%):</b>				<b>\$3,552</b>
<b>Construction Management (7%):</b>				<b>\$4,973</b>
<b>Total Construction Costs:</b>				<b>\$86,672</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 3**

### East H Street - End of bike lane to Otay Lakes Rd

- Proposed in 2005 Bikeway Master Plan
- Fills gap in Class 2 connection to Southwestern College
- Existing curb-to-curb width: 80'
- Lacks existing curb-to-curb width to accommodate 5' bike lanes
- Road diet needed from 3 lanes to 2 lanes each way to accommodate bike lanes and reduction of raised center median
- Proposed alignment: Four 13' travel lanes, one 14' raised median/TWLT, two 5' bike lanes with 2' buffers. Buffers recommended due to high speed and high traffic volumes

Length: 3,010 Feet

0.57 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	0.57	\$1,881
Stripe Removal	LF	\$1.50	3,010	\$4,514
Restripe Centerline w/Reflectors	LF	\$2.25	3,010	\$6,772
Pavement Markings	EA	\$300.00	10	\$3,010
Curb and Gutter (east side only)	LF	\$32.00	3,010	\$96,307
<b>Subtotal:</b>				<b>\$112,484</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$22,497</b>
<b>Construction Costs with Contingencies:</b>				<b>\$134,981</b>
<b>Engineering and Design (10%):</b>				<b>\$13,498</b>
<b>Administration (5%):</b>				<b>\$6,749</b>
<b>Construction Management (7%):</b>				<b>\$9,449</b>
<b>Total Construction Costs:</b>				<b>\$164,676</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 4

### Fourth Avenue - Main Street to City Limit

- Connects existing bike lanes on Beyer Rd to Bike Route on Fourth Ave
- Existing curb-to-curb width: 73'
- Proposed alignment: Four 12' travel lanes, one 9' parking lane, two 6' bike lanes with 2' buffers

Length: 2,693 Feet

0.51 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.51	<b>\$1,683</b>
Stripe Removal	LF	\$1.50	2,693	<b>\$4,039</b>
Restripe Centerline w/Reflectors	LF	\$2.25	2,693	<b>\$6,059</b>
Pavement Markings	EA	\$300.00	9	<b>\$2,693</b>
Curb and Gutter (east side only)	LF	\$32.00	2,693	<b>\$86,170</b>
<b>Subtotal:</b>				<b>\$100,643</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$20,129</b>
<b>Construction Costs with Contingencies:</b>	<b>\$120,772</b>
<b>Engineering and Design (10%):</b>	<b>\$12,077</b>
<b>Administration (5%):</b>	<b>\$6,039</b>
<b>Construction Management (7%):</b>	<b>\$8,454</b>

<b>Total Construction Costs:</b>	<b>\$147,342</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 5**

### Otay Lakes Road - Elmhurst Street to Apache Drive

- Proposed in 2005 Bikeway Master Plan
- Connects existing bike lanes on Otay Lakes Road to Southwestern College
- Existing curb-to-curb width: 70'
- Proposed alignment: Five 12' travel lanes and two 5' bike lanes
- Increase bicycle awareness signage and directional signage to and from college

Length: 1,426 Feet

0.27 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.27	\$891
Stripe Removal	LF	\$1.50	1,426	\$2,138
Restripe Centerline w/Reflectors	LF	\$2.25	1,426	\$3,208
Pavement Markings	EA	\$300.00	5	\$1,426
Curb and Gutter (east side only)	LF	\$32.00	1,426	\$45,619
<b>Subtotal:</b>				<b>\$53,282</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$10,656</b>
<b>Construction Costs with Contingencies:</b>	<b>\$63,938</b>
<b>Engineering and Design (10%):</b>	<b>\$6,394</b>
<b>Administration (5%):</b>	<b>\$3,197</b>
<b>Construction Management (7%):</b>	<b>\$4,476</b>

<b>Total Construction Costs:</b>	<b>\$78,005</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 6

### Heritage Road - Main Street to Entertainment Circle

- Fills gap in Class 2 connection to Cricket Amphitheater and Knotts Soak City
- Existing curb-to-curb width: 60'
- Proposed alignment: Four 12' travel lanes and two 6' bike lanes.
- Increase bicycle awareness and directional signage throughout this segment

Length: 1,426 Feet 0.27 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	0.27	\$891
Stripe Removal	LF	\$1.50	1,426	\$2,138
Restripe Centerline w/Reflectors	LF	\$2.25	1,426	\$3,208
Pavement Markings	EA	\$300.00	5	\$1,426
Curb and Gutter (east side only)	LF	\$32.00	1,426	\$45,619
<b>Subtotal:</b>				<b>\$53,282</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$10,656</b>
<b>Construction Costs with Contingencies:</b>				<b>\$63,938</b>
<b>Engineering and Design (10%):</b>				<b>\$6,394</b>
<b>Administration (5%):</b>				<b>\$3,197</b>
<b>Construction Management (7%):</b>				<b>\$4,476</b>
<b>Total Construction Costs:</b>				<b>\$78,005</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 7

### Industrial Boulevard - Bay Boulevard to Palomar Street

- Proposed in 2005 Bikeway Master Plan
- Connects to existing bike lanes on Industrial Boulevard south of Palomar Street
- L Street existing curb-to-curb width: 74'
- L Street proposed alignment: Two 11' inside travel lanes, two 13' outer travel lanes, one 12' center turn lanes and two 5' bike lanes with 2' buffers
- Industrial Boulevard existing curb-to-curb width: 34'
- Industrial Boulevard proposed alignment: Two 11' travel lanes and two 5' bike lanes
- Colored bike lanes recommended at I-5 on-off ramps on both L Street and Industrial Boulevard for greater visibility crossing through intersection
- Increase bicycle awareness signage

Length: 4,963 Feet

0.94 Miles

### Primary Costs

#### Unit

#### Unit Cost

#### Quantity

#### Total Cost

### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.94	<b>\$3,102</b>
Stripe Removal	LF	\$1.50	4,963	<b>\$7,445</b>
Restripe Centerline w/Reflectors	LF	\$2.25	4,963	<b>\$11,167</b>
Pavement Markings	EA	\$300.00	17	<b>\$4,963</b>
Curb and Gutter (east side only)	LF	\$32.00	4,963	<b>\$158,822</b>
<b>Subtotal:</b>				<b>\$185,500</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$37,100</b>
<b>Construction Costs with Contingencies:</b>	<b>\$222,600</b>
<b>Engineering and Design (10%):</b>	<b>\$22,260</b>
<b>Administration (5%):</b>	<b>\$11,130</b>
<b>Construction Management (7%):</b>	<b>\$15,582</b>

### Total Construction Costs:

**\$271,571**

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 8

### Telegraph Canyon Road - Nacion Avenue to Halecrest Drive

- Proposed in 2005 Bikeway Master Plan
- Fills gap in Class 2 facility between Telegraph Canyon Road and Oleander Avenue
- Existing curb-to-curb width: 84-104'
- Proposed alignment at minimum width (84'): Six 10.5' travel lanes, one 11' TWLT and two 5' bike lanes. Due to high ADTs, road diet not recommended, but bike lanes are
- Increase bicycle awareness and directional signage throughout this segment
- Colored bike lanes recommended at I-805 on-off ramps for greater visibility crossing these intersections

Length: 1,320 Feet 0.25 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	0.25	<b>\$825</b>
Stripe Removal	LF	\$1.50	1,320	<b>\$1,980</b>
Restripe Centerline w/Reflectors	LF	\$2.25	1,320	<b>\$2,970</b>
Pavement Markings	EA	\$300.00	4	<b>\$1,320</b>
Curb and Gutter (east side only)	LF	\$32.00	1,320	<b>\$42,240</b>
<b>Subtotal:</b>				<b>\$49,335</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$9,867</b>
<b>Construction Costs with Contingencies:</b>				<b>\$59,202</b>
<b>Engineering and Design (10%):</b>				<b>\$5,920</b>
<b>Administration (5%):</b>				<b>\$2,960</b>
<b>Construction Management (7%):</b>				<b>\$4,144</b>
<b>Total Construction Costs:</b>				<b>\$72,226</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 9**

### East H Street - I 805 SB on-ramp to existing bike lanes

- Proposed in 2005 Bikeway Master Plan
- Fills gap in Class 2 facility at I-805
- Existing curb-to-curb width: 80-92'
- Proposed alignment at minimum width (80'): Five 11' travel lanes, one 11' TWLT/RTOF and two 5' bike lanes with 2' buffers
- Increase bicycle awareness and directional signage throughout this segment
- Colored bike lanes recommended at I-805 on-off ramps for greater visibility crossing these intersections

Length: 1,954 Feet

0.37 Miles

### Primary Costs

#### Unit

#### Unit Cost

#### Quantity

#### Total Cost

### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.37	<b>\$1,221</b>
Stripe Removal	LF	\$1.50	1,954	<b>\$2,930</b>
Restripe Centerline w/Reflectors	LF	\$2.25	1,954	<b>\$4,396</b>
Pavement Markings	EA	\$300.00	7	<b>\$1,954</b>
Curb and Gutter (east side only)	LF	\$32.00	1,954	<b>\$62,515</b>
<b>Subtotal:</b>				<b>\$73,016</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$14,603</b>
<b>Construction Costs with Contingencies:</b>	<b>\$87,619</b>
<b>Engineering and Design (10%):</b>	<b>\$8,762</b>
<b>Administration (5%):</b>	<b>\$4,381</b>
<b>Construction Management (7%):</b>	<b>\$6,133</b>

### Total Construction Costs:

**\$106,895**

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 10

### Broadway - Main Street to City Limit

- Fills gap in Class 2 facility
- Existing curb-to-curb width: 56'-68'
- Road needs resurfacing and some 90-degree parking switched to parallel parking
- Proposed alignment: Two 12' travel lanes, two 8' parking lanes, two 6' bike lanes with 2' buffers

Length: 1,478 Feet

0.28 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	0.28	\$924
Stripe Removal	LF	\$1.50	1,478	\$2,218
Restripe Centerline w/Reflectors	LF	\$2.25	1,478	\$3,326
Pavement Markings	EA	\$300.00	5	\$1,478
Curb and Gutter (east side only)	LF	\$32.00	1,478	\$47,309
<b>Subtotal:</b>				<b>\$55,255</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$11,051</b>
<b>Construction Costs with Contingencies:</b>				<b>\$66,306</b>
<b>Engineering and Design (10%):</b>				<b>\$6,631</b>
<b>Administration (5%):</b>				<b>\$3,315</b>
<b>Construction Management (7%):</b>				<b>\$4,641</b>
<b>Total Construction Costs:</b>				<b>\$80,894</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 11

### East J Street - River Ash Drive to Paseo Ranchero

- Proposed in 2005 Bikeway Master Plan
- Existing Class 3 bike route upgrade to Class 2 bike lane
- Fills gap in Class 2 facility
- Existing curb-to-curb width: 48'
- Proposed alignment #1: Two 11' travel lanes, two 8' parking lanes and two 5' bike lanes. TWLT will need to be removed
- Proposed alignment #2: Two 12' travel lanes, one 12' TWLT and two 6' bike lanes. Requires removal of on-street parking
- Proposed alignment #3: Two 11' travel lanes, one 11' TWLT, one 8' parking lane and two 5' bike lanes. On-street parking will need to be removed on one side of street
- Provide additional directional signage throughout J Street

Length: 3,696 Feet

0.70 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.70	<b>\$2,310</b>
Stripe Removal	LF	\$1.50	3,696	<b>\$5,544</b>
Restripe Centerline w/Reflectors	LF	\$2.25	3,696	<b>\$8,316</b>
Pavement Markings	EA	\$300.00	12	<b>\$3,696</b>
Curb and Gutter (east side only)	LF	\$32.00	3,696	<b>\$118,272</b>
<b>Subtotal:</b>				<b>\$138,138</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$27,628</b>
<b>Construction Costs with Contingencies:</b>	<b>\$165,766</b>
<b>Engineering and Design (10%):</b>	<b>\$16,577</b>
<b>Administration (5%):</b>	<b>\$8,288</b>
<b>Construction Management (7%):</b>	<b>\$11,604</b>

<b>Total Construction Costs:</b>	<b>\$202,234</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 12

### East H Street - East of Otay Lakes Road to east of Auburn Avenue

- Proposed in 2005 Bikeway Master Plan
- Fills gap in Class 2 connection to Southwestern College
- Existing curb-to-curb width: 64'
- Lacks existing curb-to-curb width to accommodate 5' bike lanes
- Proposed alignment to accommodate existing on-street parking: Two 10' travel lanes, two 7' parking lanes and two 5' bike lanes. Removal of raised median necessary to accommodate bike lanes. Includes left turn pockets at Auburn Avenue
- Proposed alignment with removal of on-street parking: Two 12' travel lanes, one 14' raised center median, two 6' bike lanes with 2' buffers. Buffers recommended due to high speed and high traffic volumes
- Increase bicycle awareness and directional signage throughout this segment

Length: 1,320 Feet

0.25 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.25	\$825
Stripe Removal	LF	\$1.50	1,320	\$1,980
Restripe Centerline w/Reflectors	LF	\$2.25	1,320	\$2,970
Pavement Markings	EA	\$300.00	4	\$1,320
Curb and Gutter (east side only)	LF	\$32.00	1,320	\$42,240
Subtotal:				\$49,335

#### Additional Costs:

Contingencies (20%):	\$9,867
Construction Costs with Contingencies:	\$59,202
Engineering and Design (10%):	\$5,920
Administration (5%):	\$2,960
Construction Management (7%):	\$4,144

Total Construction Costs:	\$72,226
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 13

### Industrial Boulevard - Ada Street to Main Street

- Proposed in 2005 Bikeway Master Plan
- Connects to existing bike lanes on Industrial Boulevard north of Ada Street
- Industrial Boulevard existing curb-to-curb width: 32'-51'
- Industrial Boulevard proposed alignment for 32' width: Two 11' travel lanes and two 5' bike lanes
- Industrial Boulevard proposed alignment for 51' width: Two 12' travel lanes, one 11' TWTL, two 6' bike lanes with 2' buffers. Buffers can be removed and outer lanes expanded to 14' travel lanes due to heavy truck traffic
- Increase bicycle awareness signage

Length: 2,640 Feet

0.50 Miles

### Primary Costs

#### Unit

#### Unit Cost

#### Quantity

#### Total Cost

### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.50	<b>\$1,650</b>
Stripe Removal	LF	\$1.50	2,640	<b>\$3,960</b>
Restripe Centerline w/Reflectors	LF	\$2.25	2,640	<b>\$5,940</b>
Pavement Markings	EA	\$300.00	9	<b>\$2,640</b>
Curb and Gutter (east side only)	LF	\$32.00	2,640	<b>\$84,480</b>
<b>Subtotal:</b>				<b>\$98,670</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$19,734</b>
<b>Construction Costs with Contingencies:</b>	<b>\$118,404</b>
<b>Engineering and Design (10%):</b>	<b>\$11,840</b>
<b>Administration (5%):</b>	<b>\$5,920</b>
<b>Construction Management (7%):</b>	<b>\$8,288</b>

### Total Construction Costs:

**\$144,453**

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 14

### Santa Victoria Road - Olympic Parkway to Santa Venetia Street

- Under construction
- Provides alternative route to Otay Ranch High School

Length: 9,739 Feet 1.84 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 2 Bicycle Lane:</b>				
Bike Lane Striping/Signing	MI	\$3,300.00	1.84	<b>\$6,072</b>
Pavement Markings	EA	\$300.00	32	<b>\$9,600</b>
<b>Subtotal:</b>				<b>\$15,672</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$3,134</b>
<b>Construction Costs with Contingencies:</b>				<b>\$18,806</b>
<b>Engineering and Design (10%):</b>				<b>\$1,881</b>
<b>Administration (5%):</b>				<b>\$940</b>
<b>Construction Management (7%):</b>				<b>\$1,316</b>
<b>Total Construction Costs:</b>				<b>\$22,944</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 15

### Heritage Road - Olympic Parkway to Santa Victoria Road

- Under construction
- Continues Class 2 bike lanes to Santa Victoria Road

Length: 2,270 Feet

0.43 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.43	\$1,419
Stripe Removal	LF	\$1.50	2,270	\$3,406
Restripe Centerline w/Reflectors	LF	\$2.25	2,270	\$5,108
Pavement Markings	EA	\$300.00	8	\$2,270
Curb and Gutter (east side only)	LF	\$32.00	2,270	\$72,653
Subtotal:				\$84,856

#### Additional Costs:

Contingencies (20%):	\$16,971
Construction Costs with Contingencies:	\$101,827
Engineering and Design (10%):	\$10,183
Administration (5%):	\$5,091
Construction Management (7%):	\$7,128

Total Construction Costs:	\$124,229
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 16

### Lake Crest Drive - Otay Lakes Road to Wueste Road

- Fills gap between Class 2 facilities
- Connects Olympic Training Center to Otay Lakes Road and Mountain Hawk Park
- Existing curb-to-curb width: 38'-44'
- Proposed alignment (44'): Two 12' travel lanes, one 8' parking lane and two 6' bike lanes
- Low volume residential street with infrequent on-street parking. Designating one side of street for on-street parking provides space for installation of bike lanes
- Increase directional signage throughout Lake Crest Drive to Otay Lakes Road, Mountain Hawk Park and Olympic Training Center

Length: 4,646 Feet

0.88 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 2 Bicycle Lane:

Bike Lane Striping/Signing	MI	\$3,300.00	0.88	<b>\$2,904</b>
Stripe Removal	LF	\$1.50	4,646	<b>\$6,970</b>
Restripe Centerline w/Reflectors	LF	\$2.25	4,646	<b>\$10,454</b>
Pavement Markings	EA	\$300.00	15	<b>\$4,646</b>
Curb and Gutter (east side only)	LF	\$32.00	4,646	<b>\$148,685</b>
<b>Subtotal:</b>				<b>\$173,659</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$34,732</b>
<b>Construction Costs with Contingencies:</b>	<b>\$208,391</b>
<b>Engineering and Design (10%):</b>	<b>\$20,839</b>
<b>Administration (5%):</b>	<b>\$10,420</b>
<b>Construction Management (7%):</b>	<b>\$14,587</b>

<b>Total Construction Costs:</b>	<b>\$254,237</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 1

### Broadway - C Street to City Limit

- Connects to core commercial district
- If warranted, investigate alternatives such as shared lane markings on green bicycle lane similar to Second Street in Long Beach, CA
- Increase bicycle parking along this route
- Increase bicycle awareness signage and directional signage

Length: 21,965 Feet 4.16 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	4.16	<b>\$6,864</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	176	<b>\$21,965</b>
Additional Bike Parking (bike corral striping consideration)	LF	\$2.25	2,196	<b>\$4,942</b>
<b>Subtotal:</b>				<b>\$33,771</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$6,754</b>
<b>Construction Costs with Contingencies:</b>	<b>\$40,525</b>
<b>Engineering and Design (10%):</b>	<b>\$4,053</b>
<b>Administration (5%):</b>	<b>\$2,026</b>
<b>Construction Management (7%):</b>	<b>\$2,837</b>

<b>Total Construction Costs:</b>	<b>\$49,441</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 2

### I Street - Colorado Ave to Robert Ave

- Connects to Mueller Elementary School, Chula Vista Center Mall and Hilltop High School

Length: 11,458 Feet 2.17 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 3 Bicycle Route:</b>				
Bike Route Signing	MI	\$1,650.00	2.17	\$3,581
<b>Subtotal:</b>				<b>\$3,581</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$716</b>
<b>Construction Costs with Contingencies:</b>				<b>\$4,297</b>
<b>Engineering and Design (10%):</b>				<b>\$430</b>
<b>Administration (5%):</b>				<b>\$215</b>
<b>Construction Management (7%):</b>				<b>\$301</b>
<b>Total Construction Costs:</b>				<b>\$5,242</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 3

### Naples Street - Industrial Boulevard to Fourth Avenue

- Fills gap between existing bike route on Naples Street to Industrial Boulevard
- Connects to Harborside Elementary School
- Increase bicycle awareness signage and directional signage

Length: 4,541 Feet 0.86 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.86	<b>\$1,419</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	36	<b>\$4,541</b>
<b>Subtotal:</b>				<b>\$5,960</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$1,192</b>
<b>Construction Costs with Contingencies:</b>	<b>\$7,152</b>
<b>Engineering and Design (10%):</b>	<b>\$715</b>
<b>Administration (5%):</b>	<b>\$358</b>
<b>Construction Management (7%):</b>	<b>\$501</b>

<b>Total Construction Costs:</b>	<b>\$8,725</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 4

### Third Avenue - East J Street to Naples Street

- Fills gap between proposed enhanced bike route on Third Avenue to bike route south of Naples Street
- Increase bicycle awareness signage and directional signage

Length: 5,280 Feet

1.00 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	1.00	<b>\$1,650</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	42	<b>\$5,280</b>
<b>Subtotal:</b>				<b>\$6,930</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$1,386</b>
<b>Construction Costs with Contingencies:</b>	<b>\$8,316</b>
<b>Engineering and Design (10%):</b>	<b>\$832</b>
<b>Administration (5%):</b>	<b>\$416</b>
<b>Construction Management (7%):</b>	<b>\$582</b>

<b>Total Construction Costs:</b>	<b>\$10,146</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 5**

### Fifth Avenue - City Limit to Orange Avenue

- Alternative north-south connection to Broadway
- Connects to Chula Vista High School, Vista Square Elementary School, Chula Vista Middle School and other private schools
- Chula Vista Center Mall creates gap in facility. Route through mall property could include staining/painting shared use path to connect H and I Streets. Directional signage shared lane markings through parking lot another option
- Increase bicycle awareness signage and directional signage

Length: 18,638 Feet

3.53 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	3.53	<b>\$5,825</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	149	<b>\$18,638</b>
<b>Subtotal:</b>				<b>\$24,463</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$4,893</b>
<b>Construction Costs with Contingencies:</b>	<b>\$29,355</b>
<b>Engineering and Design (10%):</b>	<b>\$2,936</b>
<b>Administration (5%):</b>	<b>\$1,468</b>
<b>Construction Management (7%):</b>	<b>\$2,055</b>

<b>Total Construction Costs:</b>	<b>\$35,814</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 6

### Oxford Street and East Oxford Street - Industrial Boulevard to Melrose Avenue

- Provides alternative to Melrose Avenue as north-south connection paralleling I-805
- Provides connection to Naples Street and Palomar Street crossings of I-805 where there are no on- and off-ramps
- Increase bicycle awareness signage and directional signage

Length: 8,923 Feet 1.69 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	1.69	\$2,789
Shared Lane Marking (Sharrow)	EA	\$125.00	71	\$8,923
Subtotal:				\$11,712

### Additional Costs:

Contingencies (20%):	\$2,342
Construction Costs with Contingencies:	\$14,054
Engineering and Design (10%):	\$1,405
Administration (5%):	\$703
Construction Management (7%):	\$984

Total Construction Costs:	\$17,146
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 7**

### Third Avenue - D Street to East J Street

- Incorporate into Third Avenue Streetscape Project
- Increase bicycle parking along this route
- If warranted, investigate alternatives such as shared lane markings on green bicycle lane similar to Second Street in Long Beach, CA
- Increase bicycle awareness signage and directional signage

Length: 7,920 Feet

1.50 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	1.50	<b>\$2,475</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	63	<b>\$7,920</b>
<b>Subtotal:</b>				<b>\$10,395</b>

### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$2,079</b>
<b>Construction Costs with Contingencies:</b>	<b>\$12,474</b>
<b>Engineering and Design (10%):</b>	<b>\$1,247</b>
<b>Administration (5%):</b>	<b>\$624</b>
<b>Construction Management (7%):</b>	<b>\$873</b>

<b>Total Construction Costs:</b>	<b>\$15,218</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 8

### Third Avenue - C Street to D Street

- Fills gap between proposed enhanced bike route on Third Avenue to bike lanes on C Street
- Increase bicycle awareness signage and directional signage

Length: 2,059 Feet

0.39 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.39	\$644
Shared Lane Marking (Sharrow)	EA	\$125.00	16	\$2,059
Subtotal:				\$2,703

#### Additional Costs:

Contingencies (20%):	\$541
Construction Costs with Contingencies:	\$3,243
Engineering and Design (10%):	\$324
Administration (5%):	\$162
Construction Management (7%):	\$227

<b>Total Construction Costs:</b>	<b>\$3,957</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 9

### Melrose Avenue - Telegraph Canyon Road to Main Street

- Proposed in 2005 Bikeway Master Plan
- North-south route to connect Kellogg, Palomar and Rohr Elementary Schools
- Increase bicycle awareness signage and directional signage

Length: 13,675 Feet 2.59 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	2.59	\$4,274
Shared Lane Marking (Sharrow)	EA	\$125.00	109	\$13,675
Subtotal:				\$17,949

#### Additional Costs:

Contingencies (20%):	\$3,590
Construction Costs with Contingencies:	\$21,538
Engineering and Design (10%):	\$2,154
Administration (5%):	\$1,077
Construction Management (7%):	\$1,508

Total Construction Costs:	\$26,277
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 10

### Oleander Avenue, Lori Lane, Crest Drive - East J Street to Main Street

- Provides north-south connection paralleling I-805
- Connects to Rogers, Parkview and Valle Lindo Elementary Schools
- Provides connection to Naples Street and Palomar Street crossings of I-805 where there are no on- and off-ramps
- Increase bicycle awareness signage and directional signage

Length: 16,210 Feet 3.07 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 3 Bicycle Route:</b>				
Bike Route Signing	MI	\$1,650.00	3.07	<b>\$5,066</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	130	<b>\$16,210</b>
<b>Subtotal:</b>				<b>\$21,275</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$4,255</b>
<b>Construction Costs with Contingencies:</b>				<b>\$25,530</b>
<b>Engineering and Design (10%):</b>				<b>\$2,553</b>
<b>Administration (5%):</b>				<b>\$1,277</b>
<b>Construction Management (7%):</b>				<b>\$1,787</b>
<b>Total Construction Costs:</b>				<b>\$31,147</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 11

### Flower Street and First Avenue - First Street to Bonita Road

- Connects to Rosebank Elementary School

Length: 4,171 Feet

0.79 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.79	\$1,304
Subtotal:				\$1,304

#### Additional Costs:

Contingencies (20%):	\$261
Construction Costs with Contingencies:	\$1,564
Engineering and Design (10%):	\$156
Administration (5%):	\$78
Construction Management (7%):	\$109

Total Construction Costs:	\$1,908
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 12

### Mackenzie Creek - Mt. Miguel Road to Lane Avenue

- Fills gap between Mt. Miguel Road and Lane Avenue
- Connects to Marshall Elementary School

Length: 7,128 Feet 1.35 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	1.35	\$2,228
<b>Subtotal:</b>				<b>\$2,228</b>

### Additional Costs:

Contingencies (20%):	\$446
<b>Construction Costs with Contingencies:</b>	<b>\$2,673</b>
Engineering and Design (10%):	\$267
Administration (5%):	\$134
Construction Management (7%):	\$187

<b>Total Construction Costs:</b>	<b>\$3,261</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 13**

### Woods Drive, Stone Gate Street, Northwoods Drive, Adirondack Place, Duncan Ranch Road - Proctor Valley Road and Hunte Parkway to Otay Lakes Road

- Connects to Eastlake Middle School, Salt Creek Elementary School, Monteville Park and local trail system
- Increase bicycle awareness signage and directional signage

Length: 10,560 Feet 2.00 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	2.00	\$3,300
Shared Lane Marking (Sharrow)	EA	\$125.00	84	\$10,560
<b>Subtotal:</b>				<b>\$13,860</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$2,772</b>
<b>Construction Costs with Contingencies:</b>	<b>\$16,632</b>
<b>Engineering and Design (10%):</b>	<b>\$1,663</b>
<b>Administration (5%):</b>	<b>\$832</b>
<b>Construction Management (7%):</b>	<b>\$1,164</b>

<b>Total Construction Costs:</b>	<b>\$20,291</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 14

### Santa Venetia Street - Olympic Parkway to Magdalena Avenue

- Fills Class 2 gap between La Media Road and Windchime Drive
- Connects to Otay Ranch High School
- Roadway too narrow to accommodate Class 2 bike lanes
- Shared lane markings recommended between Olympic Parkway and La Media Road to access high school and pedestrian bridge

Length: 3,696 Feet 0.70 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 3 Bicycle Route:</b>				
Bike Route Signing	MI	\$1,650.00	0.70	<b>\$1,155</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	30	<b>\$3,696</b>
<b>Subtotal:</b>				<b>\$4,851</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$970</b>
<b>Construction Costs with Contingencies:</b>				<b>\$5,821</b>
<b>Engineering and Design (10%):</b>				<b>\$582</b>
<b>Administration (5%):</b>				<b>\$291</b>
<b>Construction Management (7%):</b>				<b>\$407</b>
<b>Total Construction Costs:</b>				<b>\$7,102</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 15

### Albany Avenue - East Orange Avenue to Main Street

- Connects to Otay Elementary School
- Provides bike route between Main Street and Orange Ave

Length: 2,429 Feet 0.46 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.46	\$759
<b>Subtotal:</b>				<b>\$759</b>

### Additional Costs:

Contingencies (20%):	\$152
<b>Construction Costs with Contingencies:</b>	<b>\$911</b>
Engineering and Design (10%):	\$91
Administration (5%):	\$46
Construction Management (7%):	\$64

<b>Total Construction Costs:</b>	<b>\$1,111</b>
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# City of Chula Vista Bikeway Master Plan Update\

## Capital Cost Estimate

Rank: 16

### East San Miguel Drive, Cuyamaca Avenue, Guatay Avenue - Vista Way to Hilltop Drive

- Residential loop connects to Cook Elementary School

Length: 5,174 Feet 0.98 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.98	\$1,617
Subtotal:				\$1,617

#### Additional Costs:

Contingencies (20%):	\$323
Construction Costs with Contingencies:	\$1,940
Engineering and Design (10%):	\$194
Administration (5%):	\$97
Construction Management (7%):	\$136

Total Construction Costs:	\$2,367
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 17

### Max Avenue, Malta Avenue, Slate Street - East Orange Avenue to Melrose Avenue

- Residential loop connects to Rohr Elementary School

Length: 4,277 Feet 0.81 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.81	\$1,337
<b>Subtotal:</b>				<b>\$1,337</b>

### Additional Costs:

Contingencies (20%):	\$267
<b>Construction Costs with Contingencies:</b>	<b>\$1,604</b>
Engineering and Design (10%):	\$160
Administration (5%):	\$80
Construction Management (7%):	\$112

<b>Total Construction Costs:</b>	<b>\$1,957</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 18

### Gotham Street, Creekwood Way, Chateau Court - Nacion Avenue to Halecrest Drive

- Proposed in 2005 Bikeway Master Plan
- Connects to Southwestern College
- Access needed through wall barrier at Chateau Court. Pedestrian and bicycle width cut-through recommended if entire wall not removed
- Increase bicycle awareness signage and directional signage

Length: 2,798 Feet 0.53 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.53	\$875
Cut Through Wall	EA	\$1,000.00	1	\$1,000
Subtotal:				\$1,875

#### Additional Costs:

Contingencies (20%):	\$375
Construction Costs with Contingencies:	\$2,249
Engineering and Design (10%):	\$225
Administration (5%):	\$112
Construction Management (7%):	\$157

Total Construction Costs:	\$2,744
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

**Rank: 19**

### East Rienstra Street and Nacion Avenue - East L Street/Telegraph Canyon Road to Melrose Avenue

- Provides alternative to Melrose Avenue as north-south connection paralleling I-805
- Provides connection to Naples Street and Palomar Street crossings of I-805 where there are no on- and off-ramps
- Increase bicycle awareness signage and directional signage

Length: 8,923 Feet 1.69 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	1.69	<b>\$2,789</b>
Shared Lane Marking (Sharrow)	EA	\$125.00	71	<b>\$8,923</b>
<b>Subtotal:</b>				<b>\$11,712</b>

#### Additional Costs:

<b>Contingencies (20%):</b>	<b>\$2,342</b>
<b>Construction Costs with Contingencies:</b>	<b>\$14,054</b>
<b>Engineering and Design (10%):</b>	<b>\$1,405</b>
<b>Administration (5%):</b>	<b>\$703</b>
<b>Construction Management (7%):</b>	<b>\$984</b>

<b>Total Construction Costs:</b>	<b>\$17,146</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 20

### Allen School Lane - Otay Lakes Rd to Allen Elementary School

- Connects to Allen Elementary School

Length: 1,690 Feet 0.32 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 3 Bicycle Route:</b>				
Bike Route Signing	MI	\$1,650.00	0.32	\$528
<b>Subtotal:</b>				<b>\$528</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$106</b>
<b>Construction Costs with Contingencies:</b>				<b>\$634</b>
<b>Engineering and Design (10%):</b>				<b>\$63</b>
<b>Administration (5%):</b>				<b>\$32</b>
<b>Construction Management (7%):</b>				<b>\$44</b>
<b>Total Construction Costs:</b>				<b>\$773</b>



# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 21

### Oak Springs Drive - Silver Springs Drive to South Creekside Drive

- Fills gap to South Creekside Drive
- Connects to Salt Creek Park, Arroyo Vista Elementary and local clubhouse

Length: 1,162 Feet 0.22 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.22	\$363
<b>Subtotal:</b>				<b>\$363</b>

### Additional Costs:

Contingencies (20%):	\$73
<b>Construction Costs with Contingencies:</b>	<b>\$436</b>
Engineering and Design (10%):	\$44
Administration (5%):	\$22
Construction Management (7%):	\$30

<b>Total Construction Costs:</b>	<b>\$531</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 22

### Hidden Vista Drive, Smoky Circle, and Bayleaf Drive - Terra Nova to City Limits

- Provides connection to Sweetwater community and then to Bonita Road
- Utilizes existing access path to connect to Vista Coronado Drive in Sweetwater
- Connects to Clearview Elementary School

Length: 3,432 Feet 0.65 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
<b>Class 3 Bicycle Route:</b>				
Bike Route Signing	MI	\$1,650.00	0.65	\$1,073
<b>Subtotal:</b>				<b>\$1,073</b>
<b>Additional Costs:</b>				
<b>Contingencies (20%):</b>				<b>\$215</b>
<b>Construction Costs with Contingencies:</b>				<b>\$1,287</b>
<b>Engineering and Design (10%):</b>				<b>\$129</b>
<b>Administration (5%):</b>				<b>\$64</b>
<b>Construction Management (7%):</b>				<b>\$90</b>
<b>Total Construction Costs:</b>				<b>\$1,570</b>

# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 23

### Santa Rosa Drive, Santa Paula Drive - Otay Lakes Road to East Palomar Street

- North-south connection between H and East Palomar Streets
- Increase bicycle awareness signage and directional signage

Length: 5,491 Feet 1.04 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	1.04	\$1,716
<b>Subtotal:</b>				<b>\$1,716</b>

#### Additional Costs:

Contingencies (20%):	\$343
Construction Costs with Contingencies:	<b>\$2,059</b>
Engineering and Design (10%):	\$206
Administration (5%):	\$103
Construction Management (7%):	\$144

<b>Total Construction Costs:</b>	<b>\$2,512</b>
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# City of Chula Vista Bikeway Master Plan Update

## Capital Cost Estimate

Rank: 24

### State Street - Santa Victoria Road to La Media Road

- Fills gap between Birch Road and Santa Victoria Road
- Add additional signage for roundabout

Length: 1,003 Feet 0.19 Miles

Primary Costs	Unit	Unit Cost	Quantity	Total Cost
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#### Class 3 Bicycle Route:

Bike Route Signing	MI	\$1,650.00	0.19	\$314
<b>Subtotal:</b>				<b>\$314</b>

### Additional Costs:

Contingencies (20%):	\$63
<b>Construction Costs with Contingencies:</b>	<b>\$376</b>
Engineering and Design (10%):	\$38
Administration (5%):	\$19
Construction Management (7%):	\$26

<b>Total Construction Costs:</b>	<b>\$459</b>
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